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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,170	04/20/2001	Shigemi Kurashima	1614.1162	9034

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EXAMINER

NGUYEN, KIMNHUNG T

ART UNIT	PAPER NUMBER
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2629

DATE MAILED: 07/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/838,170	Applicant(s) KURASHIMA ET AL.	
	Examiner Kimnhung Nguyen	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 2/1/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 16-23 and 28-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This application has been examined. The claims 1-30 are pending. The examination results are as following.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/28/06 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-11, 16-23, and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hum et al. (US 6,714,133) in view of Rilling (US 6,564,044).

Regarding claims 1, 16, Hum et al. discloses in figure 1, an input system (10) comprising an information generation part which generates input information (12) based on a given input operation; a transmission part (6) substantially simultaneously transmitting a first signal and a second signals (see signals 17a-17c) generated by having a plurality of different carrier frequencies modulated with the same input information (see interrogator 12 may generate signals of different radio frequencies, see col. 8, lines 21-24, col. 10, lines 35-38); and a reception part

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(6) receiving the transmitted signals and demodulating (4) the signals into the same input information (12).

However, Hum et al. does not disclose a simultaneously transmitting a first signal and a second signal with the same input.

Rilling discloses in fig. 2, a transmitting system having a first and a second signals pairs are transmitted simultaneously from the same antenna (see abstract, see col. 3, lines 36-37).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the transmitting system having a first and a second signals are transmitted simultaneously from the same antenna as taught by Rilling into the information generation part generating input information based on a given input operation of Hum et al. for producing the claimed invention because this would provide the receiving antenna 24 collects all the multipath components, the characteristics of each pair are preserved as if they were transmitted alone (see col. 3, lines 39-43).

Regarding claims 2, 17, Hum discloses in figure 1, the input system further comprising wave direction parts (see signals 17a-17c) which are provided close to said transmission part so as to provide the signals transmitted from said transmission part with directivity.

Regarding claims 3, 18, Hum discloses wherein said wave direction parts are antennas (see signals 17a-17c).

Regarding claims 4, 19, Hum discloses in fig. 1, the transmission part (6) comprises a plurality of transmission circuits (2, 4, 5, 7) for transmitting the signals of the different carrier frequencies as discussed above.

Regarding claims 5-6, 20-21, Hum discloses in figure 1, the transmission part (6) comprises an output part (8) which successively outputs of the different carrier frequencies and modulation part (4) as discussed above.

Regarding claim 7, Hum discloses in fig. 1, the reception part (6) comprises a plurality of reception circuits (4, 5, 7) for receiving the transmitted signals and demodulating (4) the signals into the input information (10).

Regarding claims 8-9, Hum discloses the input system further comprising an inherent pad member (because input device (9) is a keypad, keyboard or another input device (see col. 6, lines 51-53) and including conductive wire (see col. 3, lines 53-56), and further comprising a conductive part (see keyboard).

Regarding claims 10, 23, Hum discloses further an inherent conductive plate member (see keyboard associated with objects such as dashboards and provide feedback to the user), and conductive part (keyboard), therefore, wherein said conductive part contacts said conductive plate member so that the signals transmitted from the transmission part are transmitted via said conductive part to the conductive plate member.

Regarding claim 11, Hum discloses in fig. 1, the input system comprising a plurality of wave direction parts (see signals 17a-17c) for receiving the signals transmitted from said transmission part (6), said wave direction parts being provided on a side of said reception part (6).

Regarding claim 30, Hum discloses in fig. 1, an input device, comprising an information generation part generating input information (10) based on an input operation; and a transmission

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part (6) substantially simultaneously transmitting the same input information by a plurality of carrier frequencies (see col. 8, lines 21-24, col. 10, lines 35-38).

Allowable Subject Matter

4. Claims 12-15 and 24-27 are allowed.

5. The following is an examiner's statement of reasons for allowance: The present invention is directed to an information generation part generating input information based on given input operation; a transmission part generating a signal by having a carrier frequency modulated with the input information, and transmitting the generated signal; a plurality of wave direction parts provided close to said transmission part so as to provide the signal transmitted from said transmission part with directivity. The combination of the closest prior art of Hum et al. (US 6,714,133) and Rilling (US 6,564,044) show a similar invention, however, they fail to teach that wherein the signal transmitted at a timing from the transmission part is provided alternatively to the wave direction parts so that the same input information is transmitted alternately through the wave direction parts as claims 12 and 24

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response To Arguments

6. Applicant's arguments with respect to claims filed on 2/1/06 have been considered but are moot in view of the new ground(s) of rejection.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Kimnhung Nguyen
Patent Examiner
July 7, 2006